

Title (en)

BRANCHED AMORPHOUS POLYAMIDE (CO)POLYMERS AND METHODS OF MAKING AND USING SAME

Title (de)

VERZWEIGTE AMORPHE POLYAMID(CO)POLYMERE UND VERFAHREN ZUR HERSTELLUNG UND VERWENDUNG DAVON

Title (fr)

(CO)POLYMÈRES DE POLYAMIDE AMORPHES RAMIFIÉS ET PROCÉDÉS DE FABRICATION ET D'UTILISATION ASSOCIÉS

Publication

**EP 4136185 A1 20230222 (EN)**

Application

**EP 21789196 A 20210413**

Priority

- US 202063010496 P 20200415
- IB 2021053039 W 20210413

Abstract (en)

[origin: WO2021209895A1] Branched amorphous polyamide (co)polymers having a backbone formed by reacting a reaction mixture including at least 25 mol% of a di-amine selected from a secondary di-amine, a branched di-amine, or a combination thereof; and an aliphatic acid blend including a branched aliphatic dimer acid and a branched aliphatic trimer acid. The molar equivalent ratio of the di-amine to the aliphatic acid blend is 0.9-1.1. Preferably, the branched amorphous polyamide (co)polymer is not telechelic. The branched amorphous polyamide (co)polymer preferably exhibits one or more of a shear modulus of from 10,000 to 500,000 Pa at 70°C, a complex viscosity of greater than 1,000,000 mPa\*s at 70°C, a glass transition temperature of less than 25°C, or a number average molecular weight of greater than 10,000 Da. Biodegradable and/or compostable adhesive articles including the branched amorphous polyamide (co)polymer also are disclosed.

IPC 8 full level

**C09K 5/14 (2006.01)**

CPC (source: EP US)

**C08G 69/265** (2013.01 - EP); **C08G 69/34** (2013.01 - EP); **C08G 73/1042** (2013.01 - US); **C08G 73/122** (2013.01 - US);  
**C09J 7/10** (2017.12 - US); **C09J 7/38** (2017.12 - US); **C09J 11/08** (2013.01 - US); **C09J 177/08** (2013.01 - EP); **C09J 2301/408** (2020.08 - US);  
**C09J 2301/414** (2020.08 - US); **C09J 2477/00** (2013.01 - US); **C09J 2479/08** (2013.01 - US); **C09J 2493/00** (2013.01 - US)

C-Set (source: EP)

**C09J 177/08 + C08L 77/08 + C08L 93/04**

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

**IB 2021053039 W 20210413**; CN 202180028623 A 20210413; EP 21789196 A 20210413; US 202117995867 A 20210413